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The Clock is Ticking for Rural America

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This chapter examines the issues of marginalization as they relate to circumstances in the United States. Marginalization as used in this chapter refers to situations where farming is no longer a viable activity given the existing patterns of land use and the changes in socio-economic structure.

The United States is a large and diverse country. U.S. agriculture and rural America are equally diverse. As such, it is hard to make sweeping statements about the country and what is happening. But, there are some general observations that can be made regarding the changing face of rural America.

The United States has become a largely an urban nation. Approximately three-fourths of the population lives on just 3 percent of the land base. In spite of, or perhaps because of, the urban population concentration, there is a growing concern over the loss of farmland and rural open spaces.

Before discussing the changes in rural America and the programs that are being used to protect rural America it is necessary to examine the changes that are occurring within U.S. agriculture and that have an impact on rural America. The results of these changes are more pronounced in agricultural regions.

In the recent past, U.S. agriculture has been characterized by increasing concentration in production, processing and retailing. In addition, we are seeing increases in vertical integration of the production agriculture sector with more value-added processing occurring.

A farm in the United States is defined as any place that sold or could have sold \$1,000 in agricultural products annually. Based on the 2002 Census of Agriculture, there were approximately two million farms in the United States and the majority of these are small farms. The very smallest farms, with sales less than \$1,000, represented 27 percent of all U.S. farms but had only .5 percent of the sales. (Remember that the definition of a farm includes those units that could have sold \$1,000 worth of products.)

Farms with sales under \$25,000 represented 71 percent of all U.S. farms, yet they had only 4 percent of the agricultural sales in 2002. (USDA, National Agricultural Statistics Service, 2002 Census of Agriculture, 2003)

The large farms in the United States, those with sales over \$500,000, represented 3 percent of the U.S. farms total. They accounted for 61 percent of the sales in 2002.

The changes in farms between the 1997 and 2002 Census of Agriculture highlight the trend towards a dual agriculture in the United States. The smallest category farms, those with sales of less than \$1,000, increased by 37 percent and the very largest farms,

with sales over \$1 million, increased by 8 percent. The numbers in all other farm size categories decreased.

The increase in the very largest and the very smallest farms represents what has been termed ‘the disappearing middle’ of U.S. farms. In other words, we are seeing the middle-sized farms change in size or go out of business entirely. This is the dual agriculture in the United States; a large number of very small farms representing an insignificant portion of the sales and a very small number of large farms representing the majority of sales.

The U.S. Department of Agriculture’s Economic Research Service has devised a typology to help illustrate the nature of production agriculture in the United States. (Hoppe, et. al. 2000) In this typology, farms are divided based on the amount of sales, the stated principal occupation of the operator and the financial characteristics of the farm. The residential/lifestyle category farms represented 40 percent of U.S. farms in 2004. These are small farms (farms with sales less than \$250,000) where the operator reported something other than farming as the principal occupation. Another category, retirement farms, represents 16 percent of the farms. These are small farms where the operator reported being retired. These two categories account for over half the farms in the United States.

This typology shows the concentrated nature of the production in U.S. agriculture. It also reveals that a large majority of U.S. farms are small farms. These farms control a relatively small percentage of the value of land and buildings in the United States. For example, the 56 percent of the farms that are lifestyle or retirement farms control just 11 percent of the total value of lands and buildings in U.S. farms.

There also has been a dramatic change in the input supply industry. Seed, chemical and fertilizer manufacturers and retailers have undergone substantial consolidation over the past several years. These industries, as well as processors, are characterized by fewer firms and a much higher ratio of the sales by the top four firms. (Fernandez-Carnejo, 2004, King, 2001, Heffernan, 2000)

One final item to note with respect to U.S. agriculture is the level of government payments, especially relative to net farm income in the areas where farming is the principal occupation. A recent USDA study examined the impact of these programs on rural development. (McGranahan and Sullivan, USDA/ERS Amber Waves, 2005) They found that “... farm program payments were not associated with reduced population loss in high-payment counties compared with other rural counties.” What they did note was that there was a correlation between the high-payment counties and a lack of natural amenities. Natural amenities are a primary driver for population growth in other non-metropolitan counties. The current commodity program payments go to counties that are low in these natural amenities.

Overall, the direct government payments to agriculture constitute a significant portion of net farm income. For the entire United States, direct government payments averaged 33 percent of the net farm income from 2000 to 2004. The forecast for 2005

was for the direct payments to be 32 percent of the net farm income. The states in the central part of the United States show government payments that averaged over 50 percent of net farm income between 2000 and 2004.

Against this backdrop of the changing structure of U.S. agriculture, we also are seeing changes in the rural communities. The United States is divided into 3,141 local government units called counties. Almost two-thirds, 65 percent, of the counties are classified as non-metropolitan. There are 21 percent of the counties in the United States that are classified as completely rural with populations of less than 2,500. The metropolitan counties, 35 percent of the total, have 83 percent of the U.S. population. (USDA/ERS, Measuring Rurality: Rural-Urban Continuum Codes, 2003)

Only 14 percent of all U.S. counties, or 21 percent of the non-metropolitan counties, are classified as farm dependent. A farm dependent county is one where 15 percent or more of the earnings in the county is from farming. The number of farming dependent counties in the United States has declined dramatically over the past few decades.

The total U.S. population grew by 13 percent from 1990 to 2000. However, 13 percent of the counties in the United States actually showed a decrease in population. These were rural counties and most of them were the counties dependent on agriculture.

The overall situation in the United States reflects a decreasing number of farms. There also was an increase in dual agricultural production systems and an increase in the part-time or retirement farms.

So what does this mean for marginalization of U.S. agriculture? The USDA's Economic Research Service has done a number of studies examining conditions in rural America. They produced a series of reports examining many aspects of these issues. These are all available on-line in two of the USDA Briefing Rooms. One is found at <http://www.ers.usda.gov/Briefing/Infrastructure/> and the other is at <http://www.ers.usda.gov/Briefing/Rurality/>

One of the issues associated with the marginalization of agriculture is the loss of farmland. In the United States, the severity of this problem depends to a large extent on the region of the country being examined.

The entire United States experienced a 5 percent decrease in the amount of land in farms from 1990 to 2004. Over the same time period, three areas experienced more than a 10 percent decrease in the land in farms. These areas were the Northeast, the Southeast, and the Delta states. Although these areas experienced a substantial decline in the land in farms, it is interesting to see that together these states only comprised 10 percent of the total land in farms in the United States during 2004. It is noteworthy that the Northeast had the highest average farmland values in the United States, averaging \$6,607 per acre. This was almost one and a half times higher than the next closest region.

Urbanization is the biggest cause of marginalization of U.S. agriculture. Land values for both urban and farmland are at record high levels. As the communities grow there is pressure to convert land from agriculture to urban land uses. In addition, there also is a strong demand for recreational land. This land is used primarily for hunting, sight-seeing or, in some cases, for a country home. Land abandonment is not a major problem in the United States. However, it is important to keep in mind that the United States is a very diverse country and that some areas are facing different issues with respect to land use and land use policies.

There have been numerous studies done to examine the changes in population, loss of farmland and the related issues surrounding marginalization of farmland in the United States. One study found that natural amenities are highly correlated with the change in rural population. (McGranahan, USDA/ERS) The climate, water area and topography were used to construct a local index in this study. This index was used to examine the changes in rural populations. The impact of the different measures varies by area, but overall the natural amenities are a significant factor in whether or not a county increased in population and economic activity.

Another study examined the effects of several socio-economic characteristics on whether or not a county experienced population increases from 1990 to 2000. Non-metropolitan counties classified as retirement or recreation counties, or ones with a predominance of federal land experienced the most growth. These counties would all be counties that ranked high on the natural amenities scale. The counties classified as dependent on mining or farming showed the least growth. In fact, less than half the farming counties showed population growth during the 1990 to 2000 period. This is due to a variety of reasons, including the fact that the farming counties would tend to be low on the amenities scale and the changing nature of agricultural production has resulted in a loss in the number of farmers and supporting activities.

The current U.S. commodity programs favor production, especially for the commodities with program support. These programs foster a lack of biodiversity in many areas as well as increased land values. They encourage farmers to keep land in production.

The loss of farms and land in farms, declining environmental quality, rural economic decline and the loss of biodiversity concern many people in the United States. All 50 states and some federal and local programs have been enacted to help alleviate these problems.

There are many types of programs available to help preserve farmland. These include purchasing the development rights to the property, zoning to prohibit certain activities, the creation of agricultural districts and other property protection programs. In addition, there have been tax programs enacted that encourage land preservation. Programs such as "right to farm" laws or preferential treatment for agricultural activities are designed to help people stay in farming and avoid having to sell the farms for development.

Hellerstein, et al recently published a study examining farmland protection laws and programs in the United States. The purpose of their study was to determine how public preferences for rural amenities influenced the laws and programs being enacted. Not surprisingly, they found that the influence of rural amenities varied considerably by region of the United States. Their study "... suggests that farmland preservation program emphases appear to depend on State-specific circumstances, including the amount of land already in parks, forests, and other conservation programs." (pg iv)

This study developed an extensive list of rural amenities or other outputs from farmland that served as a basis for the legislation they found. They condensed an expanded list of factors into five major categories. The first of these categories was orderly development. People were concerned about the orderly development of rural land to prevent sprawl. They also favored the low density, physical space that was provided by farmland.

A second category for protecting farmland was to preserve the local agriculture or timber economy. Protecting the jobs directly related to these activities was important, but so was the protection of the other natural resources and jobs.

The third category identified in the Hellerstein report was the overall protection of environmental services amenities. Citizens were concerned with pollution reduction, groundwater recharge, flood control, and water and air quality. This was especially true as it concerned the provision of amenities for the state and local area.

A fourth major category was related to the protection of the environmental amenities. The authors found a number of laws designed to protect the rural amenities themselves. Open space, the rural or agrarian character of the area, wildlife areas, natural areas and the overall aesthetics were important considerations in passing local laws and regulations within the various states.

The fifth impetus for farmland preservation was local and national food security. This affects various aspects of the marginalization of agriculture and rural America. Many areas have started promoting local foods as a means of providing extra income for area farms and processors. There also is the appeal to people to be more environmentally conscientious and not consume foods that require so much fossil fuel to transport. Finally, there is the appeal to maintaining a diverse food supply for national and local security.

Other programs in addition to farmland preservation can aid rural communities. Some states and local areas have established rural development funds that provide grants or low interest loans to businesses that locate in rural areas. Some communities provide tax and infrastructure support for businesses. There also are efforts to develop tourism, value-added industries and other activities to help rural communities cope with the changes.

Many local and state governments, as well as the federal government, are helping with programs aimed at improving farmers' income and opportunities. Farmer's markets,

community supported agriculture programs and the “buy local” campaigns are examples of such activities.

Programs that purchase development rights are in use in 19 states and 41 local jurisdictions. The states have spent approximately \$1.4B to protect 922,000 acres of farmland. The local jurisdictions have spent \$604 M to protect another 214,000 acres (Nickerson and Hellerstein, 2003)

The federal government has undertaken many programs aimed at rural development. These programs are carried out through many different federal agencies in addition to the U.S. Department of Agriculture. In many of the poorest rural communities, government transfer payments provide the majority of the income. Overall, government transfer payments made up 20 percent of the income in the non-metropolitan counties.

With respect to the federal farm programs, there are three major programs designed to protect the natural environment. Each one takes a different approach to preserving the environment.

The first of these is the Conservation Reserve Program (CRP) which was started 20 years ago under the 1985 Food Security Act. The CRP is a land retirement program where the farmer is given a yearly payment to remove the land from production. Today there are more than 30 million acres enrolled in this program.

The CRP has been criticized for causing a decline in rural communities. The argument is that removing land from production leads to a decrease in the supporting activities, and this has led to the decline of communities in areas where there is a large percentage of acres in the CRP. However, recent U.S. Department of Agriculture research “...indicates that, in aggregate, impacts have been limited. High CRP enrollment did not have a statistically significant adverse effect on population trends in farm counties across the United States.”

This is an important finding because the use of land retirement programs can be an important strategy to help improve environmental amenities. The CRP has been documented to improve water quality and wildlife habitat.

The Environmental Quality Improvement Program (EQIP) is another federal government program. It provides cost share monies for improvements in the farming operation that enhance environmental quality. For example, the EQIP funds can be used to offset the costs of new manure storage facilities or to put in terraces. This has been a successful program, but lack of funding has limited its usefulness.

Another major environmental program is the Conservation Security Program (CSP), a new program designed for working lands. Under the CSP, the farmer is paid for implementing practices that improve the environment. This is a voluntary program and the farmer can choose to participate at three different levels. Each level requires more

activities, but also offers a larger payment. The CSP was begun with the 2002 farm bill and has been available only on a limited basis to date.

These programs show three alternative approaches that can be used to protect environmental amenities from possible damage from farming. There also are approaches that can be used for farmland protection or other issues surrounding the marginalization of agriculture.

One in five U.S. counties depends on farming for a significant share of its income. But, the face of U.S. agriculture has been altered and what will happen to these communities is not clear. The federal government has spent billions of dollars on farm programs but these programs have not helped maintain the farm dependent counties.

Is marginalization a problem for U.S. agriculture? In terms of land abandonment, the answer is clearly no. There is very little, if any, farmland in the United States that is abandoned without another use. Farmland values in almost every region are at record high levels. There is, however, a considerable amount of farmland that is under pressure to change use for a variety of reasons. The amount of pressure depends to a large extent on the area and the natural amenities that are present.

Two major reasons exist for the marginalization of U.S. agriculture. First is urbanization. This is not necessarily just the growth of a city into the surrounding countryside. This is the movement of the people away from the cities into the countryside. In the state of Iowa for example, the number of people who live in the country but not on a farm now exceeds the number of people who live on a farm.

People move to the countryside for a variety of reasons. Regardless of the reason, the shift does change the rural countryside. Land values increase as the demand increases. In addition, the demand for natural amenities increases. One of the major reasons people move to the country is for natural amenities and they do not want to see these amenities destroyed or altered significantly.

The second major reason for the marginalization of U.S. agriculture is the changing nature of farms. On one hand, as farm size increases there are fewer, full-time farmers. As the number of farmers decreases, so does the number of businesses that the farmers support. On the other hand, there is a tremendous increase in the small, hobby-type farms. These farmers do not contribute as much to support the local economies, primarily because they purchase fewer agricultural inputs.

In the United States, the majority of farmers are small farmers who do not rely on farming for the bulk of their income. Over half of what are called farms in the United States either have retired operators or are lifestyle farms. These farms contribute to the rural countryside in a variety of ways, many of which are positive with respect to the preserving amenities. However, in some cases, there is a natural tension between the part-time, lifestyle farmers and the full-time farmers. The lifestyle farmers are more concerned with the natural amenities, whereas the full-time farmers must also make a living from the farm.

U.S. citizens enjoy a relatively cheap food supply. As such, for the most part, we only think about agriculture when something bad happens. Water pollution, worker problems, environmental problems and food safety scares are the only times when some people think about agriculture or the rural communities. The United States has a cheap food supply relative to the level of overall income, but there are hidden issues to be resolved. Current agricultural production techniques generate external costs that are not trivial. They have been conservatively estimated at between \$5.7 B to \$126B annually(Tegtmeier and Duffy, 2004)

There is a movement to try and change people's attitudes toward agriculture and think of agriculture in a broader context. We are recognizing that agriculture provides a vast array of goods and services beyond simply producing food and fiber.

Some would argue that it is only the developed countries that can afford to worry about marginalization of agriculture. They point out that the less developed countries must rely on agriculture for food and fiber production first, and that other attributes or natural amenities come only after adequate production. However, this is a narrow point of view with respect to agriculture and its great potential. Agriculture can help with development or it can hinder it. Developing countries must advance with a healthy agriculture as a base.

The alternative ways to view agriculture can have significant impacts. Multi-functional agriculture can help forge the bond between agriculture and the surrounding rural communities as a desirable place to live. Only time will tell if this new approach helps alleviate the problems we are seeing in agriculture and rural communities.

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